

	L #	Hits	Search Text	DBs	Time Stamp
1	L1	62	pigment near10 (treat\$4 or attach\$4 or bond\$3 or modified or modifying or modify) near10 (hydrophilic or organic) adj group	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:30
2	L2	2334	pigment near5 (anionic or cationic)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:30
3	L3	111	pigment near5 (self adj dispers\$3)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:30
4	L4	8145	pigment adj dispersion	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 08:15
5	L5	25497	(wetting adj agent or surfactant) same (acetylen\$2 adj (glycol or alcohol) or glycol adj3 ether or (ethylene or alkylene or propylene) adj glycol)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:03

	L #	Hits	Search Text	DBs	Time Stamp
6	L6	5	(1 2 3) same 4 same 5	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:30
7	L7	225606	(acetylen\$2 adj (glycol or alcohol) or glycol adj3 ether or (ethylene or alkylene or propylene) adj glycol)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 08:18
8	L8	65	(1 2 3) same 7	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:30
9	L10	327	(1 2 3) and pigment same 7	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 08:53
10	L9	75	(1 2 3) and pigment same 4 same 7	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 08:25

	L #	Hits	Search Text	DBs	Time Stamp
11	L11	75	(1 2 3) and pigment same 7 same (mill or milling or microfluidizer or homogenizer)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:31
12	L12	166	(1 2 3) and pigment same (wetting adj agent or surfactant) same (mill or milling or microfluidizer or homogenizer)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:31
13	L13	1110	(wetting adj agent or surfactant) same (acetylen\$2 adj (glycol or alcohol))	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:08
14	L14	59	(1 2 3) and 13	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:08
15	L16	1861	(wetting adj agent or surfactant) same acetylen\$2	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:08

	L #	Hits	Search Text	DBs	Time Stamp
16	L17	1	(1 2 3) and 15	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:08
17	L18	99	(1 2 3) and 16	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:09
18	L19	40	18 not 14	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:09
19	L20	19863	pigment near10 (treat\$4 or attach\$4 or bond\$3 or modified or modifying or modify)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:12
20	L22	504	pigment same 7 same (mill or milling or microfluidizer or homogenizer)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:13

	L #	Hits	Search Text	DBs	Time Stamp
21	L21	165	20 and 16	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:13
22	L23	42	22 and ink near3 jet	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:23
23	L24	115	(2 3 20) and 16 and (mill or milling or microfluidizer or homogenizer)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:28
24	L26	93103	carbon adj black	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:30
25	L27	84	26 near10 (treat\$4 or attach\$4 or bond\$3 or modified or modifying or modify) near10 (hydrophilic or organic) adj group	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:31

	L #	Hits	Search Text	DBs	Time Stamp
26	L28	322	26 near5 (anionic or cationic)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:31
27	L29	73	26 near5 (self adj dispers\$3)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:31
28	L25	7	(2 3 20) and (premix or premixing) near10 (pigment or crbon adj black) near10 (wetting adj agent or surfactant or 7)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 10:23
29	L30	2	(27 28 29) same 4 same 5	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:32
30	L31	15	(27 28 29) same 7	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:32

	L #	Hits	Search Text	DBs	Time Stamp
31	L32	8	(27 28 29) and pigment same 7 same (mill or milling or microfluidizer or homogenizer)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:33
32	L33	19	(27 28 29) and pigment same (wetting adj agent or surfactant) same (mill or milling or microfluidizer or homogenizer)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 09:34
33	L34	2	(premix or premixing) near10 (carbon adj black) near10 (wetting adj agent or surfactant or 7)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 11:16
34	L35	32	4 same (carbon adj black) near10 (wetting adj agent or surfactant or 7)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 10:35
35	L36	736	(1 2 3 20 27 28 29) and (carbon adj black) same (wetting adj agent or surfactant or 7)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 10:27

	L #	Hits	Search Text	DBs	Time Stamp
36	L38	330	36 and ink	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 10:28
37	L40	0	(premix or premixing) near10 (microjet or cab?o?jet) near10 (wetting adj agent or surfactant or 7)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 10:36
38	L39	6	4 same (microjet or cab?o?jet) near10 (wetting adj agent or surfactant or 7)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 10:36
39	L41	7	(microjet or cab?o?jet) near10 (wetting adj agent or surfactant or 7)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 10:36
40	L42	19	(microjet or cab?o?jet) same (wetting adj agent or surfactant or 7)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 10:56

	L #	Hits	Search Text	DBs	Time Stamp
41	L43	24999	(1 2 3 27 28 29 or pigment or carbon adj black) same (wetting adj agent or surfactant or 7)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 11:19
42	L44	1335	((523/160) or (523/161) or (106/31.6)).CCLS.	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 10:58
43	L45	104	(1 2 3 27 28 29) and 44	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 10:58
44	L46	1029	43 and dispersion.ti.	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 11:02
45	L47	4979	43 same dispersion	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 11:02

	L #	Hits	Search Text	DBs	Time Stamp
46	L49	71	46 and ink near3 jet	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 11:03
47	L50	531	47 and ink near3 jet	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 11:03
48	L48	238	43 and ((pigment or carbon adj black) adj dispersion).ti.	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 11:03
49	L51	173	(1 2 3 27 28 29) and (48 or 50)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 11:12
50	L52	2762	(1 2 3 27 28 29)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 11:12

	L #	Hits	Search Text	DBs	Time Stamp
51	L53	879	(1 2 3 27 28 29)	EPO; DERWEN T	2002/07/08 11:12
52	L54	183	53 and ink near3 jet	EPO; DERWEN T	2002/07/08 11:12
53	L55	8	(admix\$4) near10 (carbon adj black or pigment or microjet or carb?o?jet) near10 (wetting adj agent or surfactant or 7) and (1 2 3 27 28 29)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 11:18
54	L56	517	(1 2 3 27 28 29) and dispersion same (pigment or carbon adj black) same (wetting adj agent or surfactant or 7)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 11:20
55	L58	79	(1 2 3 27 28 29) and dispersion same (pigment or carbon adj black) same (wetting adj agent or surfactant or 7).clm.	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 11:20
56	L57	125	(1 2 3 27 28 29) and dispersion same (pigment or carbon adj black) same (wetting adj agent or surfactant or 7).ab.	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/07/08 11:27
57	FAMILY	1	2001-607254.NRAN.	DERWEN T	2002/07/08 11:26

	L #	Hits	Search Text	DBs	Time Stamp
58	L60	151	(106/31.36) .CCLS.	USPAT; US-PGP; UB; EPO; JPO; DERWEN; T; IBM_TD; B	2002/07/08 11:27

DERWENT-ACC-NO: 2001-151037
DERWENT-WEEK: 200235
COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Manufacture of aqueous dispersing material for ink, involves dry grinding pigment containing coarse particle in water-soluble resin, adding nonionic surfactant containing acetylene group and dispersing mixture in water

INVENTOR: CHIBA, A; KITAMURA, K

PATENT-ASSIGNEE: TOYO INK MFG CO LTD [TOXW]

PRIORITY-DATA: 1999JP-0097168 (April 5, 1999), 1999JP-0097169 (April 5, 1999)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES
MAIN-IPC			
JP 2000290578	October 17, 2000	N/A	004
017/00			C09D
A	April 30, 2002	N/A	000
067/00			C09B
US 6379451 B1			

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP2000290578A	N/A	1999JP-0097168	April 5, 1999
US 6379451B1	N/A	2000US-0542906	April 4, 2000

INT-CL (IPC): B02C017/20; C09B067/00 ; C09B067/40 ; C09B067/46 ; C09D017/00

RELATED-ACC-NO: 2001-331163

ABSTRACTED-PUB-NO: JP2000290578A

BASIC-ABSTRACT:

NOVELTY - Manufacture of aqueous dispersing material involves dry grinding pigment containing coarse particle in the presence of water-soluble resin, adding nonionic surfactant containing acetylene group and dispersing the mixture in water.

USE - For manufacturing of ink.

ADVANTAGE - The aqueous dispersing element is inexpensive and is manufactured easily and efficiently.

ABSTRACTED-PUB-NO: US 6379451B

EQUIVALENT-ABSTRACTS: NOVELTY - A pigment composition comprises a dry-ground pigment, a nonionic surfactant bearing an acetylene group and a water-soluble resin.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for water-based pigment dispersions using the pigment compositions and manufacturing methods for the pigment compositions.

USE - The water-based pigment dispersions are useful for water-based coatings, printing agents, water-based inks, ink jet inks and color filter manufacture.

ADVANTAGE - The pigment compositions can be dispersed into aqueous media easily and can be manufactured in a step in mass without use of large amount of water or solvent economically.

CHOSEN-DRAWING: Dwg.0/0

DERWENT-ACC-NO: 1999-101283
DERWENT-WEEK: 199931
COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Watery pigment ink, and ink jet recording and apparatus using the ink - is stable and gives a high concentration, light fast and water resistant image

PATENT-ASSIGNEE: CANON KK [CANO]

PRIORITY-DATA: 1997JP-0156074 (May 30, 1997)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES
MAIN-IPC			
JP 10330665 A 011/00	December 15, 1998	N/A	014 C09D

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP10330665A	N/A	1997JP-0156074	May 30, 1997

INT-CL (IPC): B41J002/01; B41M005/00 ; C09D011/00
ABSTRACTED-PUB-NO: JP10330665A

BASIC-ABSTRACT:

A watery pigment ink comprises a) a self-dispersing carbon black, to the surface of which at least one hydrophilic gp. is bound directly or indirectly through another atomic gp., (A); and b) a wetting agent of formula R1R2NCONHCH2CH2OH, where R1, R2= H, or CnH2nOH and n= 2, 3 (R1 and R2 are not H at the same time) Also claimed are:- (i) an ink jet recording method; and (ii) an apparatus for ink jet recording.

PREFERRED COMPOSITION The hydrophilic gp. is at least one of Formula (1)

Formula (1)-p

(M = H, alkali metal, ammonium, organic ammonium, R = 1-12C alkyl or phenyl or naphthyl which may have a substituent, preferably a basic gp.). (A) is 1-12C alkyl or phenyl or naphthyl gp. which may have a substituent, preferably a basic gp. The wetting agent is contained in an amount of 1-30 wt.%, more preferably 1-10 wt.% based on the ink. The ink further comprises a surfactant.

USE - The ink is used in ink jet recording means.

ADVANTAGE - The ink has excellent long term storage stability, stability for intermittent ejection and prevention of nozzle plugging and also gives a stable printed image having high concentration, light fastness and water resistance.

CHOSEN-DRAWING: Dwg.0/7

DERWENT-CLASS: E19 G02 P75

CPI-CODES: E10-A13B2; E31-N04D; G02-A04A; G02-A04B; G05-F03;

DERWENT-ACC-NO: 1998-335359
DERWENT-WEEK: 200164
COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Agglomerated organic pigment - comprises organic pigment compound, sulphonated organic pigment compound, univalent inorganic counter ion and bivalent or higher inorganic ions.

INVENTOR: ADACHI, K; KOMATSU, H; NAKAMURA, H; OKAMOTO, N; TSUKAHARA, M; WAKI, M; YAMAZAKI, H

PATENT-ASSIGNEE: MIKUNI COLOR LTD [MIKUNI], SEIKO EPSON CORP[SHIH], MIKUNI SHIKISO KK[MIKUNI]

PRIORITY-DATA: 1997JP-0335470 (December 5, 1997), 1996JP-0342226 (December 20, 1996), 1997JP-0144058 (June 2, 1997)

PATENT-FAMILY:

PUB-NO MAIN-IPC	PUB-DATE	LANGUAGE	PAGES
DE 69706273 E 067/08	September 27, 2001	N/A	000 C09B
EP 851005 A2 067/08	July 1, 1998	E	022 C09B
JP 11049974 A 067/46	February 23, 1999	N/A	017 C09B
US 6083315 A 067/50	July 4, 2000	N/A	000 C09B
EP 851005 B1 067/08	August 22, 2001	E	000 C09B

DESIGNATED-STATES: AL AT BE CH DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL
P
T RO SE SI CH DE FR GB IT LI NL SE

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
DE 69706273E 1997	N/A	1997DE-0606273	December 19,
DE 69706273E 1997	N/A	1997EP-0403096	December 19,
DE 69706273E 1997	Based on EP 851005A2	EP 851005 1997EP-0403096	N/A December 19,
JP 11049974A 1997	N/A	1997JP-0335470	December 5,
US 6083315A 1997	N/A	1997US-0996194	December 22,
EP 851005B1 1997	N/A	1997EP-0403096	December 19,

INT-CL (IPC): C09B067/08; C09B067/22; C09B067/46; C09B067/50;
C09D011/00

ABSTRACTED-PUB-NO: EP 851005A

BASIC-ABSTRACT:

An agglomerated organic pigment comprises: (1) an organic pigment compound; (2) either a sulphonated organic pigment compound obtained by incorporating at least one sulpho group into the organic pigment compound or a sulphonated organic pigment derivative obtained by incorporating at least one sulphonic group into a derivative of the organic pigment compound; (3) univalent inorganic counter ions bonded to sulphonic groups of component (2); and (4)

DERWENT-ACC-NO: 1998-263278
DERWENT-WEEK: 199953
COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Water-based pigment ink for use in ink-jet apparatus - comprising carbon black rendered self-dispersing by attaching hydrophilic groups, with a humectant and a water-soluble organic solvent

INVENTOR: HATTORI, Y; KATSURAGI, R ; OSUMI, K ; TAKIZAWA, Y ; TERAOKA, H

PATENT-ASSIGNEE: CANON KK (CANO)

PRIORITY-DATA: 1996JP-0315673 (November 13, 1996)

PATENT-FAMILY:

PUB-NO MAIN-IPC	PUB-DATE	LANGUAGE	PAGES
US 5976233 A 011/02	November 2, 1999	N/A	000 C09D
EP 842994 A1 011/00	May 20, 1998	E	023 C09D
JP 10195360 A 011/02	July 28, 1998	N/A	014 C09D

DESIGNATED-STATES: AL AT BE CH DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL
P
T RO SE SI

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
US 5976233A 1997	N/A	1997US-0966521	November 10,
EP 842994A1 1997	N/A	1997EP-0119728	November 11,
JP 10195360A 1997	N/A	1997JP-0308439	November 11,

INT-CL (IPC): B41J002/01; C09C001/56 ; C09D011/00 ; C09D011/02
ABSTRACTED-PUB-NO: EP 842994A

BASIC-ABSTRACT:

A water-based pigment ink comprises:

(A) a colouring material comprising self-dispersing carbon black, obtained by bonding hydrophilic group(s) directly or through another group to the surface of carbon black;

(B) a humectant of formula:

$H-(CH_2)_m-C((CH_2)_nOH)_3$

$m, n = 1-5$; and

(C) an aqueous medium comprising a water-soluble organic solvent.

Also claimed are an ink-jet recording method and ink jet system and cartridge utilising the ink.

ADVANTAGE - Clogging of ink jet orifices is avoided and ejection stability and accuracy maintained over a log period.

ABSTRACTED-PUB-NO: US 5976233A

DERWENT-ACC-NO: 1998-195449
DERWENT-WEEK: 200225
COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Surface treated organic pigment for ink-jet ink - comprises particles whose interiors do not contain sulphonic acid groups and whose surfaces do carry a sulphonic acid group

INVENTOR: IGUCHI, T; IIDA, Y ; SATAKE, S ; UEMURA, T ; URAKI, H

PATENT-ASSIGNEE: TOYO INK MFG CO LTD [TOXW]

PRIORITY-DATA: 1996JP-0268618 (October 9, 1996) , 1996JP-0265717 (October 7, 1996) , 1996JP-0265718 (October 7, 1996) , 1996JP-0265719 (October 7, 1996)

PATENT-FAMILY:

PUB-NO MAIN-IPC	PUB-DATE	LANGUAGE	PAGES
JP 3271530 B2 067/14	April 2, 2002	N/A	005 C09B
EP 834537 A1 067/08	April 8, 1998	E	020 C09B
JP 10110110 A 067/14	April 28, 1998	N/A	006 C09B
JP 10110111 A 067/20	April 28, 1998	N/A	006 C09B
JP 10110114 A 003/06	April 28, 1998	N/A	004 C09C
JP 10110129 A 011/02	April 28, 1998	N/A	007 C09D
US 5928419 A 067/50	July 27, 1999	N/A	000 C09B
JP 3141792 B2 011/00	March 5, 2001	N/A	007 C09D
EP 834537 B1 067/08	December 12, 2001	E	000 C09B
DE 69709015 E 067/08	January 24, 2002	N/A	000 C09B
JP 3271529 B2 067/20	April 2, 2002	N/A	005 C09B

DESIGNATED-STATES: AL AT BE CH DE DK ES FI FR GB GR IE IT LI LT LU LV MC NL PT
R
O SE SI DE FR GB

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP 3271530B2 1996	N/A	1996JP-0265718	October 7,
JP 3271530B2 1997	Previous Publ.	JP 10110110 1997EP-0307934	N/A October 7,
EP 834537A1 1997	N/A		
JP 10110110A 1996	N/A	1996JP-0265718	October 7,
JP 10110111A 1996	N/A	1996JP-0265717	October 7,
JP 10110114A 1996	N/A	1996JP-0268618	October 9,
JP 10110129A 1996	N/A	1996JP-0265719	October 7,
US 5928419A 1997	N/A	1997US-0944437	October 6,

CLIPPEDIMAGE= JP410237349A

PAT-NO: JP410237349A

DOCUMENT-IDENTIFIER: JP 10237349 A

TITLE: OXIDATION-TREATED CARBON BLACK, ITS PRODUCTION, AQUEOUS DISPERSION
CONTAINING THE SAME AND AQUEOUS INK

PUBN-DATE: September 8, 1998

INVENTOR-INFORMATION:

NAME

MISE, NOBUTAKE

ASSIGNEE-INFORMATION:

NAME

MITSUBISHI CHEM CORP

COUNTRY

N/A

APPL-NO: JP09358919

APPL-DATE: December 26, 1997

INT-CL_(IPC): C09C001/56; C09D011/00

ABSTRACT:

PROBLEM TO BE SOLVED: To enable the subject carbon black hardly having humic acid content and alkali ion content, excellent in dispensability (stability) to water and useful as pigment for aqueous ink by reacting carbon black with ozone in the presence of water.

SOLUTION: (A) Carbon black [e.g. carbon black having \leq 1wt.% alkali (earth) metal content, \leq 0.5wt.% total sulfur content and \leq 0.5wt.% total chlorine content and having \leq 100nm particle diameter] is oxidized with (C) ozone in the presence of (B) water until total acidic group amount of the component A becomes \geq 3 μ equ/m $</SP>$ to produce the objective carbon black. Furthermore, the oxidation is preferably carried out in (95:5) to (0.5:99.5) weight ratio of the component A: the component B.

COPYRIGHT: (C)1998, JPO

DERWENT-ACC-NO: 1998-399099
DERWENT-WEEK: 200128
COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Production of carbon black by oxidation with ozone in presence of water - for aqueous dispersion and water-based ink, useful in writing and ink jet inks (claimed) that give quality images on ordinary papers particularly for use with computer

INVENTOR: HIRASA, T; MISE, N ; YAMADA, M

PATENT-ASSIGNEE: MITSUBISHI CHEM CORP [MITU]

PRIORITY-DATA: 1997JP-0256388 (September 22, 1997) , 1996JP-0347529 (December 26, 1996) , 1997JP-0000699 (January 7, 1997) , 1997JP-0015222 (January 29, 1997) , 1997JP-0075532 (March 27, 1997)

PATENT-FAMILY:

PUB-NO MAIN-IPC	PUB-DATE	LANGUAGE	PAGES
KR 2000064537 001/48	November 6, 2000	N/A	000 C09C
A 001/48	July 16, 1998	J	037 C09C
WO 9830638 A1 001/56	July 28, 1998	N/A	007 C09C
JP 10195331 A 001/56	August 11, 1998	N/A	006 C09C
JP 10212426 A 001/56	September 8, 1998	N/A	006 C09C
JP 10237349 A 001/48	December 8, 1998	N/A	009 C09C
JP 10324818 A 001/48	February 17, 1999	E	000 C09C
EP 896986 A1 001/48	October 6, 1999	N/A	000 C09C
CN 1230972 A 011/02	September 26, 2000	N/A	000 C09D
US 6123759 A			

DESIGNATED-STATES: CN KR US AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE D
E FR GB

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
KR2000064537A 1997	N/A	1997WO-JP04920	December 26,
KR2000064537A 1998	N/A	1998KR-0706692	August 26,
KR2000064537A WO 9830638A1 1997	Based on N/A	WO 9830638 1997WO-JP04920	N/A December 26,
JP 10195331A 1997	N/A	1997JP-0000699	January 7,
JP 10212426A 1997	N/A	1997JP-0015222	January 29,
JP 10237349A 1997	N/A	1997JP-0358919	December 26,
JP 10324818A 1997	N/A	1997JP-0256388	September 22,

DERWENT-ACC-NO: 1998-195449
DERWENT-WEEK: 200225
COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Surface treated organic pigment for ink-jet ink - comprises particles whose interiors do not contain sulphonic acid groups and whose surfaces do carry a sulphonic acid group

INVENTOR: IGUCHI, T; IIDA, Y ; SATAKE, S ; UEMURA, T ; URAKI, H

PATENT-ASSIGNEE: TOYO INK MFG CO LTD [TOXW]

PRIORITY-DATA: 1996JP-0268618 (October 9, 1996) , 1996JP-0265717 (October 7, 1996) , 1996JP-0265718 (October 7, 1996) , 1996JP-0265719 (October 7, 1996)

PATENT-FAMILY:

PUB-NO MAIN-IPC	PUB-DATE	LANGUAGE	PAGES
JP 3271530 B2 067/14	April 2, 2002	N/A	005 C09B
EP 834537 A1 067/08	April 8, 1998	E	020 C09B
JP 10110110 A 067/14	April 28, 1998	N/A	006 C09B
JP 10110111 A 067/20	April 28, 1998	N/A	006 C09B
JP 10110114 A 003/06	April 28, 1998	N/A	004 C09C
JP 10110129 A 011/02	April 28, 1998	N/A	007 C09D
US 5928419 A 067/50	July 27, 1999	N/A	000 C09B
JP 3141792 B2 011/00	March 5, 2001	N/A	007 C09D
EP 834537 B1 067/08	December 12, 2001	E	000 C09B
DE 69709015 E 067/08	January 24, 2002	N/A	000 C09B
JP 3271529 B2 067/20	April 2, 2002	N/A	005 C09B

DESIGNATED-STATES: AL AT BE CH DE DK ES FI FR GB GR IE IT LI LT LU LV MC NL PT
R
O SE SI DE FR GB

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP 3271530B2 1996	N/A	1996JP-0265718	October 7,
JP 3271530B2 EP 834537A1 1997	Previous Publ. N/A	JP 10110110 1997EP-0307934	N/A October 7,
JP 10110110A 1996	N/A	1996JP-0265718	October 7,
JP 10110111A 1996	N/A	1996JP-0265717	October 7,
JP 10110114A 1996	N/A	1996JP-0268618	October 9,
JP 10110129A 1996	N/A	1996JP-0265719	October 7,
US 5928419A 1997	N/A	1997US-0944437	October 6,

CLIPPEDIMAGE= JP408003498A

PAT-NO: JP408003498A

DOCUMENT-IDENTIFIER: JP 08003498 A

TITLE: WATER-BASE PIGMENT INK AND ITS PRODUCTION

PUBN-DATE: January 9, 1996

INVENTOR-INFORMATION:

NAME

NAGASAWA, TOSHIYUKI

ASSIGNEE-INFORMATION:

NAME

ORIENT CHEM IND LTD

APPL-NO: JP06136943

APPL-DATE: June 20, 1994

INT-CL_(IPC): C09D011/00; C09D011/16

ABSTRACT:

PURPOSE: To obtain a water-base pigment ink which can show excellent delivery stability when used for ink jet recording and has a density high enough to give smooth writing even when a thin penpoint is used by adding water with carbon black having a specified surface active hydrogen content to a water-base pigment ink.

CONSTITUTION: This ink is a water-base pigment ink comprising water and carbon black, wherein the carbon black used is carbon black having a surface active hydrogen content of 1.5mmol/g or above. It is desirable that the carbon black used has a high surface active hydrogen content, for such carbon black shows good water dispersibility. Because the carbon black having a high surface active hydrogen content has many hydroxyl or carboxyl groups having active hydrogen atoms on the surface, the carbon black itself has improved hydrophilicity. At the same time, its surface area becomes larger and acquires chemical properties like those of an acid dye. Presumably because of these properties, the carbon black can show good water dispersibility.

COPYRIGHT: (C)1996, JPO



Creation date: 14-07-2003

Indexing Officer: HTON1 - HUAN TON

Team: OIPEBackFileIndexing

Dossier: 09832171

Legal Date: 21-05-2001

No.	Doccode	Number of pages
1	A...	✓
2	CLM	✓
3	REM	✓

Total number of pages: 3

Remarks:

Order of re-scan issued on